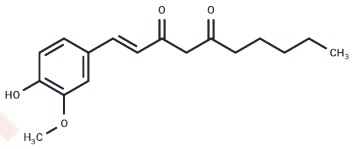
Data Sheet (Cat.No.TN1171)

TargetMol

6-Dehydrogingerdione

Chemical Properties



CAS No. : 76060-35-0

Formula: C17H22O4

Molecular Weight: 290.35

Storage: Store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	6-Dehydrogingerdione sensitizes human hepatoblastoma Hep G2 cells to TRAIL-induced apoptosis via a reactive oxygen species-mediated mechanism that enhances DR5 expression, up-regulates Ser-15 phosphorylation, and triggers nuclear translocation of p53. Abrogation of p53 using small interfering RNA markedly reduces 6-Dehydrogingerdione-induced DR5 and diminishes TRAIL responsiveness. ROS generation accompanies DR5 activation, and pretreatment with N-acetyl-L-cysteine significantly attenuates these apoptotic responses, confirming 6-Dehydrogingerdione acts through p53-dependent and oxidative stress-mediated apoptotic pathways.
Targets(IC50)	Apoptosis,TNF
In vitro	6-Dehydrogingerdione (0-150 μM, 24 hours) induced apoptosis in Hep G2 cells in a dose-dependent manner [1].

Solubility Information

Solubility	DMSO: 80 mg/mL (275.53 mM),Sonication is recommeded. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.4441 mL	17.2206 mL	34.4412 mL
5 mM	0.6888 mL	3.4441 mL	6.8882 mL
10 mM	0.3444 mL	1.7221 mL	3.4441 mL
50 mM	0.0689 mL	0.3444 mL	0.6888 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Chung-Yi Chen, et al. 6-dehydrogingerdione sensitizes human hepatoblastoma Hep G2 cells to TRAIL-induced apoptosis via reactive oxygen species-mediated increase of DR5. J Agric Food Chem. 2010 May 12;58(9):5604-11.